

Product Overview

Excel singlemode fibre optic pigtails are manufactured from the highest quality 900 micron optical fibre, terminated with ceramic ferrule connectors of various types. To assist in fast cable preparation and splicing semi tight buffered, easy strip, cable is used as standard. Cable preparation, termination and testing is carried out to strictly managed procedures in an Excel approved, ISO9001 registered manufacturing facility.

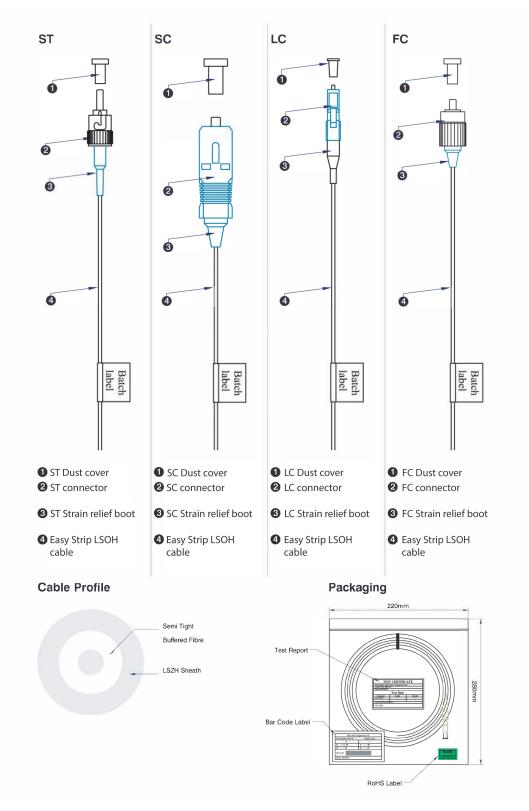
Each pigtail has a strain relief boot to prolong and maintain performance levels of the assembly. A short distance from the connector a label containing a unique batch number is fixed to cable for quality and traceability purposes.

Product Specifications

Feature	Values
Fibre type	Single mode
Category	OS2
Length	1 m
Type of connector	LC
APC-type	no
Colour	Yellow
Strain relief boot	Push-on



Product schematics





Fibre specifications

Features	Values
Mode Field diameter at 1310nm	8.4 - 9.2μm
Mode Field diameter at 1550nm	9.3-10.3µm
Cladding diameter	$125.0 \pm 0.7 \mu m$
Cladding Non-circularity	≤ 0.7%
Primary Coating diameter	235 - 245µm
Coating-Cladding Concentricity Error	≤ 12µm
Coating Non-circularity	≤ 6.0%
Core-Cladding Concentricity Error	≤0.5µm
Max. attenuation at 1310nm	≤0.35 dB/km
Max. attenuation at 1383nm	≤0.35 dB/km
Max. attenuation at 1460nm	≤0.25 dB/km
Max. attenuation at 1490nm	≤0.23 dB/km
Max attenuation at 1550nm	≤0.21 dB/km
Max attenuation at 1625nm	≤0.23 dB/km
PMD (typical value)	0.04 ps/km
Cut-off wavelength	1260nm
Zero dispersion wavelength	1300-1324 nm
Zero dispersion slope	≤0.092 ps/nm2.km
Refractive Index at 1310nm	1.466
Refractive Index at 1550nm	1.467
Macro-Bend Loss - 10 turns, 15mm radius, 1625nm	≤0.03dB
Macro-Bend Loss - 10 turns, 15mm radius, 1550nm	≤0.1dB
Macro-Bend Loss - 1 turn, 10mm radius, 1550nm	≤0.1dB
Macro-Bend Loss - 1 turn, 10mm radius, 1625nm	≤0.2dB
Macro-Bend Loss - 1 turn, 7.5mm radius, 1550nm	≤0.5dB
Macro-Bend Loss - 1 turn, 7.5mm radius, 1625nm	≤1.0dB



Cable specifications

Features	Values	ST Assemblies	SC Assemblies	LC Assemblies
Construction	Semi-Tight Buffered			
No. of Fibres	1			
Diameter	900 micron			
Temperature range	-20C to +70C			
Connector Material		Nickel plated Brass	Composite	Composite
Minimum bend radius	10 x cable diameter			
Connector Ferrule		2.5mm Zirconium ceramic	2.5mm Zirconium ceramic	1.25mm Zirconium ceramic
Connector Insertion Loss	Max. 0.3dB			
Connector Return Loss (Multimode)	Max30dB			
Ferrule End Face (Singlemode UPC)	Max50dB			
Ferrule End Face (Singlemode APC)	Max60dB			

Standards

Applicable standard	Detail
IEC 60793-1-1:2017	Optical fibres - Part 1-1: Measurement methods and test procedures - General and guidance
IEC 60793-2:2015	Optical fibres - Part 2: Product specifications - General
IEC 60793-2-10:2017	Sectional specification for A1 multimode fibres
IEC 60793-1-20:2014	Optical fibres - Part 1-20: Measurement methods and test procedures - Fibre geometry
IEC 60793-1-21:2001	Optical fibres - Part 1-21: Measurement methods and test procedures - Coating geometry
IEC 60793-1-22:2001	Optical fibres - Part 1-22: Measurement methods and test procedures - Length measurement
IEC 60793-1-30:2010	Optical fibres - Part 1-30: Measurement methods and test procedures - Fibre proof test



IEC 60793-1-31:2010	Optical fibres - Part 1-31: Measurement methods and test procedures - Tensile Strength
ITU-T G652.1:2016	Characteristics of a 9/125 μm multimode graded index optical fibre cable for the optical access network
EN 50173-1:2018	Information technology. Generic cabling systems - General requirements
EN 50173-2:2007 + A1:2010	Information technology. Generic cabling systems - Office premises
IEC 61754-1:2013	Fibre optic interconnecting devices and passive components - Fibre optic connector interfaces - Part 1: General and guidance
IEC 61754-2:1996	Fibre optic connector interfaces - Part 2: Type BFOC/2,5 connector family
IEC 61754-4:2013	Fibre optic interconnecting devices and passive components - Fibre optic connector interfaces - Part 4: Type SC connector family
IEC 61754-4-100:2015	Fibre optic interconnecting devices and passive components - Fibre optic connector interfaces - Part 4-100: Type SC connector family - Simplified receptacle SC-PC connector interfaces
RoHS	Compliant to the Restriction of Hazardous Substances
ANSI/TIA 568-3.D	Optical Fiber Cabling and Components Standard
ISO/IEC 11801-1:2017	Information technology - Generic cabling for customer premises: Part 1 General Requirements
WFD	Compliant to Waste Framework Directive
SCIP	Compliant - Does Not Contain Substances of Concern in Products

Part Number Table

Part Number	Description
200-648	Excel Enbeam Fibre Pigtail OS2 9/125 ST/UPC Yellow 1 m (12-Pack)
200-649	Excel Enbeam Fibre Pigtail OS2 9/125 SC/UPC Yellow 1 m (12-Pack)
200-650	Excel Enbeam Fibre Pigtail OS2 9/125 LC/UPC Yellow 1 m (12-Pack)
200-653	Excel Enbeam Fibre Pigtail OS2 9/125 SC/APC Clear White 1 m (12-Pack)
200-654	Excel Enbeam Fibre Pigtail OS2 9/125 FC/UPC Clear White 1 m (12-Pack)
200-655	Excel Enbeam Fibre Pigtail OS2 9/125 LC/APC Yellow 1m (12-Pack)

Excel is a world class premium performing end to end infrastructure solution designed, Manufactured, supported and delivered without compromise.



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E&OE. Excel is a registered trade name of Mayflex Holdings Ltd.